Name:

at1110paper_practice_test (v113)

1. Expand the following expression into standard form.

$$(8x + 5)(2x - 9)$$

$$16x^2 - 72x + 10x - 45$$
$$16x^2 - 62x - 45$$

2. Expand the following expression into standard form.

$$(7x + 8)(7x - 8)$$

$$49x^2 - 56x + 56x - 64$$
$$49x^2 - 64$$

3. Expand the following expression into standard form.

$$(7x - 5)^2$$

$$49x^2 - 35x - 35x + 25$$
$$49x^2 - 70x + 25$$

4. Solve the equation with factoring by grouping.

$$18x^2 + 24x - 15x - 20 \;=\; 0$$

$$(6x - 5)(3x + 4) = 0$$
$$x = \frac{5}{6} \qquad x = \frac{-4}{3}$$

5. Factor the expression.

$$64x^2 - 49$$

$(8x - 7)(8x + 7)$

6. Solve the equation.

$$10x^2 - 14 \;=\; 3x^2 - 5x + 4$$

$7x^2 + 5x - 18 = 0$

$(7x - 9)(x + 2) = 0$

$x = \dfrac{9}{7} \qquad x = -2$

7. Factor the expression.

$$x^2 + 2x - 48$$

$(x - 6)(x + 8)$

8. Solve the equation.

$$(4x - 5)(9x + 8) \;=\; 0$$

$x = \dfrac{5}{4} \qquad x = \dfrac{-8}{9}$